

WHAT IS CLAIMED IS:

5

1. A device testing contactor comprising:
a wiring board having a flexible substrate
and electrode pads formed on the substrate, the
electrode pads being electrically connected to
10 electrodes of a device; and

a first reinforcing member formed by a
mold, which first reinforcing member reinforces the
wiring board,

wherein the wiring board and the first
15 reinforcing member are collectively bonded and
molded.

20

2. The device testing contactor according
to claim 1, further comprising

a core member which restricts thermal
deformation of the first reinforcing member,

25 wherein the wiring board, the first
reinforcing member, and the core member are
collectively bonded and molded.

30

3. The device testing contactor according
to claim 2, wherein the core member is provided with
anchor portions cutting into the first reinforcing
35 member.

4. The device testing contactor according to claim 1, wherein

the wiring board is made of a material which exhibits a thermal expansion greater than a molding contraction of the first reinforcing member when the first reinforcing member is formed by the mold.

10

5. The device testing contactor according to claim 1, wherein

a bonding area increasing portion is formed on a bonding surface of the wiring board to which the first reinforcing member is bonded, so as to increase a bonding area between the wiring board and the first reinforcing member.

20

6. The device testing contactor according to claim 1, further comprising a second reinforcing member formed on a surface of the wiring board opposite to a surface of the wiring board to which the first reinforcing member is bonded, the second reinforcing member reinforcing the wiring board,

wherein the wiring board, the first reinforcing member, and the second reinforcing member are collectively bonded and molded.

35

7. The device testing contactor according to claim 6, wherein the first reinforcing member and

the second reinforcing member are integrally connected via holes formed in the wiring board.

5

8. The device testing contactor according to claim 1, wherein the wiring board is of a membrane type.

10

9. The device testing contactor according to claim 1, wherein the first reinforcing member has an opening.

20

10. The device testing contactor according to claim 9, further comprising a back-up member made of an elastic material in the opening.

25

11. The device testing contactor according to claim 10, wherein a film member is interposed between the wiring board and the back-up member, so that relative displacement is possible between the wiring board and the back-up member.

35

12. A device testing carrier comprising:

a device testing contactor;

a pressure mechanism which pushes a device toward a wiring board provided in the device testing contactor; and

5 a cushion member which absorbs a pressing force of the pressure mechanism.

10

13. A method of producing a device testing contactor comprising the steps of:

mounting a wiring board to a metal mold made up of an upper mold and a lower mold provided
15 with a lower cavity having a shape corresponding to a shape of a first reinforcing member; and

forming the first reinforcing member by injecting a reinforcing material into the metal mold, so that the wiring board and the first reinforcing
20 member are collectively bonded.

25

14. The method according to claim 13, wherein the step of mounting the wiring board includes the step of attaching a core material to the lower cavity.

30

15. The method according to claim 13, wherein the step of mounting the wiring board
35 includes the step of disposing a back-up member in the lower cavity in a place facing a mounting position on the wiring board.

16. The method according to claim 13,
wherein:

an upper cavity having a shape
corresponding to a shape of a second reinforcing
5 member is formed in the upper cavity of the metal
mold; and

the reinforcing member forming step
includes the step of injecting the reinforcing
material into the metal mold so that the first and
10 second reinforcing members and the wiring board are
collectively bonded.

15

17. The method according to claim 16,
wherein:

the wiring board has through holes in
predetermined positions; and

20 the reinforcing member forming step
includes the step of integrally connecting the first
and second reinforcing members via the through holes.

25

18. The method according to claim 13,
wherein the reinforcing member forming step includes
the step of controlling a temperature of the wiring
30 board so that a thermal expansion of the wiring
board is larger than a molding contraction of the
reinforcing member.

35

19. The method according to claim 13,

wherein the reinforcing member is formed while a tension load is applied to the wiring board in the reinforcing member forming step.

5

20. A method of testing a device,
comprising the step of:

10 electrically connecting electrode pads of
a device testing contactor to electrodes of a device
being tested;

the electrode pads being formed on a
wiring board of the device testing contactor, and
15 being reinforced by a reinforcing member, and

the device testing contactor comprising
the wiring board and the reinforcing member
collectively bonded to each other.

20